

Machining

Explore product development from concept to consumer



Students gain a global understanding of precision machining, the process of removing metal to create extremely accurate parts. They learn all aspects of the advanced manufacturing industry, including how to operate CNC (Computer Numerical Controlled) lathes, mills and power saws. The creation of blueprints and designs using industry-driven software and technology is covered, as is performing quality control and inspections. Students will also be exposed to basic welding.

Units of Study

- OSHA 10 hour course
- Safety
- Power saws
- Manual machining Mill/Lathe
- CNC (Computer Numerically Controlled)
- CAD (Computer Aided Design)
- CAM (Computer Aided Manufacturing)
- Metallurgy
- 3-D printing
- GD&T (Geometric Dimensioning and Tolerancing)

Available Academic Credits

- English
- Math

Licensing / Industry- Based Certifications

OSHA 10 Construction

College Credits

MCC Dual Enrollment:

- TAM 101: Machine Theory I
- TAM 121: Mathematics for Machinists
- TAM 131: Machine Shop Print Reading I
- TAM 141: Machine Shop Laboratory

Work-Based Learning

CTE programs bring students into the workplace for real life experiences. Businesses that support our Machining program:

- SPX Flow
- Micro Inc.
- Boss Precision
- Brinkman
- Machine Tool Research
- Kodak
- Acro
- Alliance Precision Plastics

Explore more:

<https://www.onetonline.org/find/>
<https://www.careerzone.ny.gov/>

Articulation Agreements

SUNY Canton



Career Paths

All CTE programs correlate to many career paths.

↓ **Start Here**

- CNC Operator
- Mill Operator
- Lathe Operator

Go Here ↓

with more education & experience

- Programmer
- Engineer
- Manufacturing Manager

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